

EMERGING INFECTIOUS DISEASES

A Peer-Reviewed Journal Tracking
and Analyzing Disease Trends

Style Guide for Authors and Editors

This brief guide is a quick reference intended to answer questions about manuscript preparation asked by authors and editors.

Table of Contents

I. General Information

Authorship

Clearance Procedures for CDC Authors

Copyright

Instructions to Authors

Manuscript Preparation

abstract and keywords

appendixes

biographical sketches

electronic formats

references

tables and figures

text

title page

Manuscript Submission

Types of Articles

Another Dimension

Book Reviews

Commentary

Dispatches

Letters

News and Notes

Perspectives

Policy Review

Research Studies

Synopses

II. Specific Style Issues

Abbreviations and Acronyms

Capitalization

other capitalization preferences

titles

trade names

Geographic Designations

Numbers

blood factors

equations

figures versus words
fractions
numbered lists
percentages
ranges
ratios
virus designations

Preferred Usage

affect, effect
Alaskan native, Alaska native
American Indians, Native Americans
among, between
and, or
age designations
based on, on the basis of
biopsy
black, African American
brevity
CDC
case, patient
commercial sex workers, prostitutes
compare to, with
compose, comprise
controls
dehumanizing terms
develop
diagnose
die of
different from
dosage, dose
due to, owing to
e.g and i.e
eliminate, eradicate
epidemic, endemic
etc.
etiology, cause
expire, die
feel, believe
fever, temperature
few, little (fewer, less; fewest, least)
former Soviet Union
homosexual, bisexual, gay
-ic vs. -ical
immunize, vaccinate
in, among
incidence, prevalence
individual, person
inject, inoculate
injection, intravenous drug user(s)
insure, ensure, assure
male, female
molecular weight
morbidity, morbidity rate
mortality, mortality rate (AMA)
negative, normal
offspring

-ology
parameter
parasitemia
patient
person, persons, people
present, present with
preventative, preventive
react, test
redundant phrases
resolve
risk of, for, from
sacrifice
serum, sera
sex partners
significant
subject
time designations
titer
tracking
U.S. citizens
varying, various
youth in high-risk situations

Punctuation

colon
commas
em dashes
en dashes
footnote symbols, numbers, letters
hyphenated compound adjectives
hyphens
italics
parenthesis and brackets
periods
possessives
prefixes
restrictive and nonrestrictive clauses
semicolons
suffixes
virgules

References

abstracts
articles in press
dissertations, theses
internet citations
journal names
organization as author
secondary sources
when CDC is the author

Scientific Nomenclature

bacteria
viruses

Spelling

change British spelling to American
commonly misspelled words

Statistical Terms

common tests

mathematical symbols (+, ≠, =, <, >, , , ~.)
other common statistical terms
probability
symbols

Tables and Figures

abbreviations
captions and legends
footnotes
orientation
units of measure in tables

Units of Measure

Verbs

subject-verb agreement

III. Other Resources

CDC Intranet

Comprehensive Style Guides & Other Resources

Internet Resources

I: General Information

Authorship

The journal follows CDC guidelines on authorship (Authorship of CDC or ATSDR Publications, Manual Guide General Administration CDC-69).

Clearance Procedures for CDC Authors

When submitting materials for publication in Emerging Infectious Diseases, CDC authors should follow the standard clearance and editing process through their division or program.

The CDC Associate Director for Science and the CDC/ATSDR Excellence in Science Committee, in collaboration with the Management Analysis and Services Office, have revised the policy on clearance procedures for manuscripts. This revised policy focuses primarily on scientific and technical documents and provides guidelines on cross-clearance procedures and dispute resolution, expanded definitions pertaining to clearance, and additional guidance on filing and retention of record copies and accompanying documentation.

The policy can be accessed through the CDC Intranet. Select CIO Intranet Home Pages, then choose Management Analysis and Services Office; select Policy Management, then select General Administration under CDC Policies, then choose Clearance Procedures for Scientific and Technical Documents.

<http://basis1.cdc.gov/BASIS/masombp/POLICIES/POLICIES/DDD/66>

Copyright

All material published in Emerging Infectious Diseases is in the public domain and may be used and reprinted without special permission; proper citation, however, is appreciated.

Instructions to Authors

The journal follows the Uniform Requirements for Manuscripts Submitted to Biomedical Journals (Ann Intern Med 1997;126[1]36-47)
(<http://www.acponline.org/journals/resource/unifreqr.htm>)

Manuscript Preparation

The sections of a manuscript should appear in this order: title page, abstract and key words, text, acknowledgments, biographical sketch(es), references, tables, figure legends, and figures.

abstract and keywords

Abstract should be brief and should not contain references, tables, or figures.

Include up to 10 keywords; use terms listed in the Medical Subject Headings from Index Medicus (<http://www.nlm.nih.gov/tsd/serials/lji.html>).

appendixes

Occasionally, appendixes are used for data that cannot be represented easily as a table or figure but are central to the article. In these instances, we follow the AMA Manual of Style (9th edition), excerpted below:

Appendixes are cited in the text as a table or figure would be cited (Appendix 1) and are usually placed at the end of the article, before the references.

If the appendix cites references but contains no figures or tables, it should be placed before the reference list for the article, and the references should be sequential with those in the text.

If the appendix contains figures or tables, but cites no references, the appendix should be placed after the text and text reference list, and the figures and tables should be numbered separately in the appendix and the text (Appendix Table, Appendix Figure 1).

If the appendix has figures or tables and references, the appendix should be placed after the text and text reference list, and both the figures and tables and the references should have new numbering (Appendix Figure 1, Appendix Table 1, and a separate reference list beginning with reference 1).

biographical sketches

Provide a brief sketch (no more than three sentences) for the first author (both authors, if there are only two). Include title, areas of expertise, and research interests. If the author has moved, state where the original work for this study was performed.

electronic formats

For word processing, use WordPerfect or MS Word. Create tables within the word processing program's table feature (not columns and tabs within the word processing program). Do not use endnotes for references. Send graphics in native, .TIF (Tagged Image File) AND .EPS (Encapsulated Postscript) formats when possible. The preferred font for graphics files is Helvetica. Convert Macintosh files into the suggested formats and also provide camera-ready prints or transparencies.

references

Follow the Uniform Requirements (<http://www.icmje.org/index.html#reference>) style. Within text, place reference numbers in parentheses (not in superscripts) and number citations in order of appearance (in text, figures, and tables). Cite personal communications, unpublished data, and manuscripts in preparation or submitted for publication in parentheses in text. Consult List of Journals Indexed in Index Medicus for accepted journal abbreviations; if a journal is not listed, spell out the journal title in full. List the first six authors followed by "et al." Do not use End Notes for references. Limit references to 40-60 for longer articles, 15 for dispatches, 10 for letters.

tables and figures

Create tables within the word processing program's table feature (not columns and tabs within the word processing program). Do not submit tables as photographs or graphic files. Illustrations are encouraged; use color as needed. Send as electronic files, slides, photographs, or prints. Avoid tables and figures in landscape style. Figures, symbols, lettering, and numbering should be clear and large enough to remain legible when reduced (a minimum of 12-point size before reduction). Place figure keys within the figure. Capitalize first word only on axis labels. Units in thousands must have commas (e.g., 1,000). Use color only when needed for clarity. For other considerations, study the ASM Manual of Style.

Provide a text equivalent for every non-text element (charts, graphs, photographs) explaining the meaning in such a way that a visually impaired person can understand it. For more information, contact the Web Accessibility Initiative, Section SOB of the Rehabilitation Act; <http://www.section508.gov>

text

Double-space everything, including the title page, abstract, references, tables, and figure legends. Type only on one side of the paper and number all pages, beginning with the title page. Use tabs to indent paragraphs; leave no extra space between paragraphs. Leave only one space between sentences. Use Courier font size 12 and ragged right margins. Italicize (rather than underline) scientific names when needed.

title page

Give title. Give complete information about each author (i.e., full name, affiliation, and the name of the institution in which the work was done). Also provide address for correspondence (include fax number and e-mail address).

Manuscript Submission

Include a cover letter verifying that the final manuscript has been seen and approved by all authors. Complete the EID Checklist for Authors and submit.

Submit three copies of the original manuscript with three sets of original figures and an electronic copy (on diskette or by e-mail) to the Editor, Emerging Infectious Diseases, Centers for Disease Control and Prevention, 1600 Clifton Road, Mailstop D61, Atlanta, GA 30333, USA; e-mail eideditor@cdc.gov

Types of Articles

Perspective, Synopses, Research Studies, and Policy Reviews:

Articles should be no more than 3,500 words and should include no more than 40 references. Use of subheadings in the main body of the text is recommended. Photographs and illustrations are encouraged. Provide a short abstract (150 words) and a brief biographical sketch.

Another Dimension

Thoughtful essays on philosophical issues related to science and human health.

Book Reviews

Short reviews (250 to 500 words) of recently published books on emerging disease issues are welcome.

Commentary

Thoughtful discussions (500 to 1,000 words) of current topics. Commentaries should not include figures or tables.

Dispatches

These brief articles are updates on infectious disease trends and research. The articles include descriptions of new methods for detecting, characterizing, or subtyping new or reemerging pathogens. Developments in antimicrobial drugs, vaccines, or infectious disease prevention or elimination programs are appropriate. Case reports are also welcome. Dispatches (750 to 1,500 words) need not be divided into sections. Provide a short abstract (50 words); references, not to exceed 15; figures or illustrations, not to exceed two; and a brief biographical sketch of the first author.

Letters

This section includes letters that give preliminary data or comment on published articles. Letters (500 to 1,000 words) should not be divided into sections, nor should they contain figures or tables. References (not more than 10) may be included.

News and Notes

We welcome brief announcements (50 to 150 words) of timely events of interest to our readers. (Announcements may be posted on the journal web page only, depending on

the event date.) In this section, we also include summaries (500 to 1,000 words) of conferences focusing on emerging infectious diseases. Summaries may provide references to a full report of conference activities and should focus on the meeting's content.

Perspectives

Articles in this section should provide insightful analysis and commentary about new and reemerging infectious diseases or related issues. Perspectives may also address factors known to influence the emergence of diseases, including microbial adaptation and change; human demographics and behavior; technology and industry; economic development and land use; international travel and commerce; and the breakdown of public health measures. Articles should be approximately 3,500 words and should include references, not to exceed 40. If detailed methods are included, a separate section on experimental procedures should immediately follow the body of the text. Photographs and illustrations are encouraged.

Policy Reviews

Articles in this section report public health policies that are based on research and analysis of emerging disease issues.

Research Studies

These articles report laboratory and epidemiologic results within a public health perspective. Although these reports may be written in the style of traditional research articles, they should explain the value of the research in public health terms and place the findings in a larger perspective (e.g., "Here is what we found, and here is what the findings mean").

Synopses

This section comprises concise reviews of infectious diseases or closely related topics. Preference is given to reviews of new and emerging diseases; however, timely updates of other diseases or topics are also welcome. Use of subheadings in the main body of the text is recommended. If detailed methods are included, a separate section on experimental procedures should immediately follow the body of the text. Photographs and illustrations are encouraged.

II: Specific Style Issues

(Note: parenthetical acronyms refer to style guides listed in Part III)

Abbreviations and Acronyms

A sentence can begin with an abbreviation. It cannot begin with a figure or symbol.
WBC count was . . .
Alpha (not) particles are. . .(CMS)

The article "a" or "an" should match the sound of the abbreviation or acronym, not the word for which it stands. (AMA)
an HMO report, but a health maintenance organization

However, articles are often omitted in front of abbreviations.
CDC, not "the CDC"

Avoid too many abbreviations. Use standard abbreviations only; do not make up abbreviations. Spell out on first mention and use only if acronym occurs at least five times.

Abstracts may contain abbreviations following three or more uses, especially if the term is long. (ASM)

See ASM for the complete list of abbreviations that do not need to be introduced; some common examples are

AIDS
bp
DNA
EDTA
HIV
RNA

The following are some abbreviations that must be introduced but are allowed after initial mention (see ASM for complete list):

AZT
CFU
CNS
CSF
ECG, not EKG
ELISA
Government agencies (PAHO, WHO, CDC, WTO, FAO, USDA, FDA, APHIS, EPA)
HACCP
HPS
HUS
IFA (immunofluorescence assay)
IgG, IgM
IL
MDRTB (not MDR-TB)
PCR
RT-PCR
TB
VRE

Dates – Spell out months in text. In tables, figures (AMA), and references (UR), abbreviate months using the first three letters.

Capitalization

Avoid unnecessary capitalization. Follow CMS.

Capitalize any word, including an article, following a colon a) if it begins a full sentence, b) if it begins a subtitle, or c) if it is the first word in a table stub (heading) or cell within a table. This does not apply to subtitles in references (See Uniform Requirements).

other capitalization preferences

a.m., p.m. (ASM)
California encephalitis
eastern equine encephalomyelitis
Ebola (named after the Ebola River in Zaire)
federal
formalin
Guinea worm disease
Gulf Coast
Internet
Legionnaires' disease
Mercurochrome
Pacific Coast
simian immunodeficiency virus
Sin Nombre virus
Southeast Asia
Southern blot
St. Louis encephalitis
Suramin
Teflon
the Gambia, the Netherlands, The Hague
Gram stain, gram-negative, gram-positive (CBE)
Venezuelan equine encephalomyelitis
webpage, website, the web
West Africa (CMS)
western equine encephalomyelitis
Western Hemisphere
Western blot
X-ray is preferred over x-ray (radiograph is preferred when referring to the image rather than the particles)

titles

Capitalize the first initial of all words except articles, coordinating conjunctions, and prepositions (regardless of length). (ASM)

Exceptions:

Lowercase "to" as a preposition but capitalize as an infinitive.

Ability of Gene xyz To Induce Susceptibility to Penicillin

Lowercase "that" as a subordinating conjunction but capitalize as a relative pronoun.

Evidence That Penicillin-Resistant Strains Are Common
Strains that are Resistant to Penicillin

Capitalize both words in hyphenated compound adjectives. (ASM)

Penicillin-Resistant gonorrhea

Titles of books and journals are neither italicized nor placed within quotation marks.

trade names

Trade names should generally be capitalized. If a name is not found in dictionary or style manuals, follow author. Do not use TM and ® with trade names.

Geographic Designations

Spell out names of states and U.S. territories and possessions when they stand alone or follow a county name. (AMA)

Use postal abbreviations in references, addresses, or product identification.
XYZ product (ABC Co., Atlanta, GA)

Abbreviate U.S. as adjective; write out as noun. U.K. may be used.
U.S. citizens
Citizens of the United States

Time--Use sec (seconds), min (minutes), hr (hours) with no periods and a space after the number (3 sec, 2 min, 5 hr) in tables and figures. In text, write out unless used repeatedly in a technical section such as Materials and Methods. Do not pluralize time abbreviations.

Numbers

Use SI units. ASM (Tables 2.1 to 2.4, 1991 edition, list SI units and conversions). Some medical measurements, however, follow other conventions.

height (meters) blood pressure (mm Hg)
weight (kilograms) oxygen pressure (cm H₂O)
volume (liters) blood and clinical chemistry
temperature (Celsius)

To report both SI and conventional units, repeat the number in parentheses along with the unit of measure.

20 mmol/L (20 meq/L)

Use commas in all numbers with four or more digits.

Exception:

Dates

2,000 people by the year 2000

blood factors

factor VIII (Roman)

equations

Displayed equations and text are not separated with punctuation.

Distance is calculated as follows:

$$D = x(y)$$

where D = distance, x = time, and y = rate

But if the same equation is run into text (i.e., not displayed), use a comma.

Distance is calculated as $D = x(y)$, where D = distance and...

In equations, single letter abbreviations and variables are italicized; the surrounding parentheses are not. (ASM)

Word equations have initial capital letters and no end punctuation.

(Number of new cases/Number of people at risk)

figures versus words

Use figures for all units of measure (including standard deviations, volumes, drops), age, time (including decades), and money. In table headings, follow rules for numbers. In journal titles, spell out numbers.

Twofold through ninefold, 10-fold on up, 2.5-fold, severalfold (ASM)

Spell out words for numbers and ordinals between one and nine; use figures for 10 and above; do not use superscript for ordinals.

Nine, 10, ninth, 10th

Exceptions:

For two or more numbers in a series or related numbers within a sentence, if one number is 10, use figures for all.

Of the 300 tumors, between 2 and 11 were adenocarcinomas.

We used 5 of the 82 samples. These five showed...

At the beginning of a sentence, spell out all numbers.

Twenty milligrams was injected.

When two numbers are adjacent, spell out one (usually the nonmeasure) number.

fractions

Decimals are preferred to fractions, when possible. Spell out fractions whose terms are both lower than 10, and use figures and the virgule if higher. (ASM)

three quarters, two thirds, 1/12
two-thirds majority

Hyphenate fractions used as adjectives but not as nouns. (CBE)

two thirds of the diagnoses
a two-thirds majority

numbered lists

Avoid unless necessary; use Arabic numbers followed by single parentheses (to avoid confusion with references). (CBE)

Three conditions were met: 1) handwashing procedures, once not strictly followed, were enforced; 2) isolation procedures were instituted; and 3) staff were trained in additional preventive measures.

percentages

Immediately follow the number, not the phrase.

The disease was found in 12 (50%) of the 24 children at the picnic.

ranges

Limit to specific statistical meaning. In text, use "to."

18 to 20 years
from 5% to 10%
from 1984 to 1990

Within tables and figures, hyphens, not en-dashes, are used in ranges; in legends and headings, use en-dashes.

1982-1984
25%-35%

Repeat symbols in ranges, but do not repeat words. (AMA)

40°C to 70°C, 25% to 50%
The angles varied by five to six degrees.

ratios

Use colon (length:width, 2:1).

virus designations

HIV-1, HIV-2 (Arabic)
HTLV-III (Roman)

Preferred Usage

affect, effect

affect (v) = to influence

affect (n) = subjective aspect of an emotion (psychological studies)

effect (v) = to bring about or initiate

effect (n) = result or outcome

Alaskan Native, Alaska native

Alaska native = anyone who was born and raised in Alaska, regardless of cultural background.

Alaskan Native = a person having origins in any of the original peoples of the area that is now Alaska, and who maintains cultural identification through tribal affiliation or community recognition

American Indians, Native Americans

Both terms are acceptable. [source: Indians Are Us? Culture and Genocide in Native North America by Ward Churchill, 1994] Native Americans is preferred in EID.

among, between

"among" always applies to more than two objects.

"between" literally applies to only two objects but may be used with more than two when each is treated individually, as in "a treaty between three powers" (CBE).

and, or

Avoid using. In most cases, either "and" or "or" is correct. When a choice cannot be made, use "X, Y, or both."

age designations

neonate or newborn	birth to 1 month of age
infant	1 month to 2 years of age
child	2 to 13 years of age
school-age	5 to 18 years
teenage	13 to 19 years
adolescent	13 to 17 years of age
adult	18 years old and older
childbearing age	15 to 44 years old
elderly	(follow author)

Note:

Do not say "zero age."

based on, on the basis of

"based on" is often erroneously used to mean "on the basis of." Correctly used, it follows forms of the verb "to be."

The calculations were based on the following results.

biopsy

The procedure of removing and examining tissue, cells, or fluids from the living body. Observations are made on the biopsy specimen, not on the biopsy itself. Biopsy is a noun; do not use as a verb. (AMA)

black, African American

Follow author, but "black" is not capitalized.

brevity

Use as few words as possible to make a point

the majority of	most or many
prior to	before
at the present time	now
at the time that	when
in terms of	in, of, for
the truth is	is
the facts are	are
in order to	to

CDC

not "the CDC"

case, patient

A case is a particular instance of disease, illness, injury, or asymptomatic disease. Distinguish between a case (a situation or set of circumstances) and a patient (a human being). Cases do not show symptoms, experience side effects, recover, or die; patients do. Do not dehumanize persons into cases. ("Case-patient," however, is an acceptable term.)

Clostridium perfringens was isolated in a case of diarrhea or from a patient with diarrhea.

Erythromycin is recommended for treating patients with legionellosis.

commercial sex workers, prostitutes

Follow author.

compare to, with

One thing or person is usually compared with another when the aim is to examine similarities or differences in detail. A thing is compared to another when a single striking similarity (or dissimilarity) is observed, or when a thing of one class is likened to one of another class, without analysis (AMA). In most cases, use compare with.

compare with = to examine in detail so as to discover the similarities or differences

The sodium levels of the patients in the control group were compared with those of the patients in the study group.

compare to = to liken to (to point out comparison without the act of detailed analysis)

Shall I compare thee to a summer's day?

compose, comprise

Compose = to total, form, to go together, to make up (an object)

The district is composed of three counties.

Comprise = to include, to contain, to be made up of, to be composed of

The whole comprises the parts; the parts do not comprise the whole.
A district comprises three counties.

controls

Persons are used as controls.

dehumanizing terms

Describe a person as having a condition, not being the condition.

person with diabetes, not a diabetic
person with arthritis, not an arthritic
person with asthma, not an asthmatic
person with AIDS, not AIDS patient

develop

Diseases develop in patients. Patients do not develop diseases.

diagnose

To evaluate, identify

Conditions, syndromes, diseases, and pathogens are diagnosed.
Patients are not diagnosed.

die of

Patients die of, not from specific diseases or disorders. (AMA)

different from

Use different from, not different than.

dosage, dose

Dosage implies a regimen; dose implies a quantity. (AMA)

dosage = the amount of medicine to be taken by a patient in a given period

dose = the amount taken at one time

due to, owing to

These terms are not synonymous. "Due to," an adjective, should be attached only to a noun or pronoun and should not be used in place of owing to, because of, on account of, which are compound prepositions. (WIT) A good rule of thumb is to use "due to" with forms of the verb "to be."

e.g. and i.e.

Place a comma after these abbreviations. Do not use "etc." in an e.g. or i.e. segment.

e.g. = for example, such as

i.e. = that is, in other words

Examples may be introduced by "e.g." but should not be followed by "e.g."

Correct:

In evaluating an I.Q. score several factors, e.g., socioeconomic level, must be considered.

Incorrect:

Socioeconomic level, e.g., is a factor to be considered.

eliminate, eradicate

Disease is eradicated from the entire world, eliminated from a country or region.

epidemic, endemic

A disease is endemic in an area; the area is not endemic.

endemic malaria, disease-endemic areas

epidemic = a disease that occurs suddenly and in numbers in excess of what would be expected (because it was introduced from outside)

endemic = belonging or native to a particular people or country, indigenous

etc.

Do not use in scientific writing; it is considered vague.

etiology, cause

Etiology is the study or description of causes (agents) of a disease. Do not use "etiology" as a synonym for "cause." Etiology encompasses all the possible causes of a disease.

expire, die

Patients do not expire or have fatal outcomes; they die.

feel, believe

Use "feel" to express physical sensations; use "believe" to express personal conviction, accepting something as true.

The patient felt cold.

The author believed that the theory was sound.

fever, temperature

Fever is a rise of body temperature above normal. If a patient has a temperature of 37.8°C, he has a fever of 0.8°C.

Also correct:

The patient was febrile (37.8°C). (AMA)

Note:

Please use the degree symbol located in "Symbol" font or ASCII Alt+248; do not use a superscript lowercase "o."

few, little (fewer, less; fewest, least)

"Few" refers to units or individuals that can be counted.

"Little" refers to quantities of mass, bulk, or volume.

former Soviet Union

Refer to individual country. As a whole, refer to "Newly Independent States."

homosexual, bisexual, gay

Follow author on these terms. Sometimes the phrase "men who have sex with men" is used because some of these men do not label themselves as gay, homosexual, or bisexual.

-ic vs. -ical

Dispense with most -al endings. For example, use epidemiologic, geographic, serologic, logistic, immunologic, toxicologic, anatomic.

Author's preference, however, may be followed, e.g., biological warfare.

immunize, vaccinate

immunize = to confer immunity

vaccinate = to administer vaccine

in, among

Conditions usually occur in, not among, persons.

The 25 cases of measles were in school-aged children
infection in patients, not infection among patients

incidence, prevalence

incidence (a rate) = number of new cases per unit of population per unit of time

prevalence = number of existing cases per unit of population at a given time (point prevalence) or in a given time (period prevalence).

individual, person

"Person" is a noun; "individual" is an adjective (e.g., an individual student).

inject, inoculate

Inject a fluid; inoculate an animal or person. Liquid cannot be inoculated into an animal or a petri dish; it is injected into or spread on.

We inoculated each mouse with a 0.5-mL aliquot.
We injected a 0.5-mL aliquot into each mouse.

injection, intravenous drug user(s)

Be aware of the difference between injection drug users (IDU) and intravenous drug users (IVDU). The former includes other forms of drug abuse such as intramuscular injection.

insure, ensure, assure

insure = to guarantee life or property against risk (e.g., to underwrite; to give, take, or procure insurance [CBE])

ensure = to make certain or guarantee (CBE)

assure = to make safe, to give confidence to (Webster)

male, female

Both terms are adjectives. For nouns, use man, woman, boy, girl, or infant.

molecular weight

The relative mass of a substance. It is a pure number and has no units.

Incorrect:

The molecular weight of a protein is 30,000 Da.

Correct:

The molecular weight of the protein is 30,000. (CBE)

Correct:

The molecular mass . . . is 30,000 Da. (ASM)

morbidity, morbidity rate

morbidity = the condition of being diseased, the rate of illness or disease. "Illness" or "disease" is preferred over "morbidity"; avoid "morbidity rate."

mortality, mortality rate (AMA)

mortality = the number of deaths from a particular condition. "Death" is preferred over "mortality."

mortality rate = the number of deaths in a particular population divided by the size of that population at the same time.

negative, normal

Examinations and most laboratory tests are neither negative nor normal in and of themselves; interpretations of the tests, however, may be negative or normal.

Observations, results, or findings from examinations and tests are normal or abnormal.

Cultures, tests for microorganisms, tests for specific reactions, and reactions to tests may be negative or positive.

Electroencephalograms, electrocardiograms, isotope scans, and roentgenograms are "pictures" and are, therefore, normal or abnormal, not negative or positive. (AMA)

Urinalysis results were normal, not urinalysis was normal.

offspring

Use "children," not "offspring" for humans.

-ology

This suffix means "a branch of knowledge, science, or study of." Terms ending in -ology (e.g., etiology, pathology, serology) should not be used to describe particular items. (AMA)

Incorrect:

The pathology was located in the upper part of the gastrointestinal tract.

Correct:

The pathologic lesion was located in the upper part of the gastrointestinal tract.

Incorrect:

The histology was small-cell carcinoma of the lung.

Correct:

The histologic diagnosis was small-cell carcinoma of the lung.

Incorrect:

The patient's serology showed . . .

Correct:

The patient's serologic test results showed . . .

Incorrect:

We used the following methodology.

Correct:

We used the following method.

parameter

Parameter has a specific statistical meaning and should not be used simply to mean measurement, value, or number. Ordinarily, except when a descriptive quantity for a statistical population is meant, parameter should be changed to measurement, value, quantity, variable, number, or a comparable term. (AMA)

parasitemia

Change to "levels of parasitemia." (Do not say "burden.")

patient

An ill person who is receiving or has received medical care. Do not use the term "normal patients."

person, persons, people

Person is preferred over "individual."

The plural of person is "persons," not "people." The latter term refers to a group of persons who share particular characteristics (e.g., the American people).

present, present with

Jargon.

Incorrect:

The patient presented with . . .

Correct:

The patient sought treatment for . . .

Correct:

The patient had . . .

preventative, preventive

"Preventative" is becoming obsolete. "Preventive" is preferred.

react, test

A substance is tested for a reaction with another substance; it is not reacted with another substance.

redundant phrases

large in size - large
period of time - period
very unique - unique

resolve

Symptoms are resolved; patients do not resolve their symptoms.

risk of, for, from

What is my risk of getting AIDS?

Men who have sex with other men are at highest risk for AIDS.

The most serious risk from AIDS is death.

sacrifice

A euphemism for killing laboratory animals after an experiment. Preferred terms are "humanely kill" or "euthanize."

serum, sera

Serum samples or serum specimens are preferred terms, but "sera" is acceptable.

sex partners

not sexual partner

However, "sexual behavior" is an acceptable term.

significant

Significant has a specific statistical meaning. If that is not the meaning intended, substitute a synonym, e.g., important, marked, noteworthy, substantial.

subject

Substitute participant, patient, or person.

time designations

March to August (not inclusive)

March through August (inclusive)

1960s, not 1960's

once a day, not daily

twice a day, not twice daily

1986 to 1987 (1-year period)

1986 through 1987 (2-year period)

Avoid "between" (e.g., between 1986 and 1987)

titer

A noun, not a verb.

Incorrect:

were titered

Correct:

titers of . . . were determined

tracking

Jargon.

Incorrect:

tracking people

Correct:

analyzing trends among persons . .

U.S. citizens

Is preferred over Americans.

varying, various

varying = that which is changing (adjective) or causing to change (verb)

various = of different kinds or aspects

youth in high-risk situations

to avoid categorization by group, do not use "high-risk youth." Similarly, replace "high-risk groups" with "groups at high risk."

Punctuation

colon

A colon may be used to introduce a list or series. Do not capitalize the first word after a colon (unless it would be capitalized for other reasons such as beginning a sentence or a subtitle). Do not use a colon to introduce a series of complete sentences. Either change the colon to a period or edit the list so that it is no longer made up of complete sentences.

Incorrect:

The cells were prepared as follows: Strain 12B was grown in G broth.
The cells were harvested by centrifugation. The pellet was dissolved in solution Y.

Correct:

The cells were prepared as follows. Strain 12 B was grown in G broth.

Incorrect:

The cells were harvested by centrifugation. The pellet was dissolved in solution Y.

Correct:

The cells were prepared as follows: strain 12B was grown in G broth, the cells were harvested by centrifugation, and the pellet was dissolved in solution Y.

If any item in a list includes a complete sentence that gives information about that item only, either edit out the colon or put the additional information in parentheses.

Incorrect:

This conclusion is based on the following results: 1) The mapping of the mutations between 0.13 and 0.23 map unit. This indicates that they lie within a 1.2-kbp region. 2) The presence of the Nif phenotype in all the mutants.

Correct:

This conclusion is based on the following results: 1) the mapping of the mutations between 0.13 and 0.23 map unit (this indicates that they lie within a 1.2-kbp region) and 2) the presence of the Nif phenotype.

Do not use a colon if the items in the list complete the sentence grammatically.

Incorrect:

XYZ medium contained: A, B, and C.

Correct:

XYZ medium contained A, B, and C.

commas

Place a comma:

after all items linked by "and" or "or" in a series, including the item before the conjunction.

after state when city is mentioned in text (In Dallas, Texas, in 1995...)

after date that gives month, day, and year in text. (The test given January 1, 1997, showed that . . .)

after an introductory phrase of five or more words. A comma can be used after fewer words if necessary to clarify the meaning.

after i.e. or e.g.

em dashes

Avoid in scientific writing. Their use is for sudden breaks in thought that change the sentence structure or amplify and expand a phrase in the main clause. Try parentheses instead.

All those exposed—patients, physicians, and visitors—were quarantined.
(CMS)

en dashes

Avoid en dashes. Do not use between reference numbers. Use only in inclusive numbers in titles and figure and table legends between compound adjectives when one element is an open compound or when at least two elements are hyphenated compounds; or, in complex modifying phrases that include suffices and prefixes and hyphens.

New York–Boston connector

In complex modifying phrases that include suffixes or prefixes, hyphens and en dashes are sometimes used to avoid ambiguity.

non-group–specific blood
manic-depressive–like symptoms

footnote symbols, numbers, letters

For addresses and affiliations, footnote symbols are used in the following order: *, †, ‡, §, ¶, #. They are doubled if more are needed. Footnotes in text use superscript numbers. Tables and figures use superscript letters. (ASM) All information at the bottom of a table must be footnoted, but all abbreviations may be in one footnote.

note: ASM Style Manual, p. 121, table 9.2, lists abbreviations that may be used without introduction in a table.

hyphenate compound adjectives.

Common and unambiguous adjectives, however, need not be hyphenated.

food safety issues, foodborne illness study, public health nurse

Do not hyphenate after an adverb ending in -ly even when used in a compound modifier preceding the word modified.

The rapidly rising temperature caused . . .

hyphens

CDC mailstops are not hyphenated.

Mailstop C12

italics

Emphasis

Do not introduce italics, underlining, or bold face type for emphasis. Use only as indicated in this style guide.

Foreign words and phrases

Some foreign words and phrases have become part of standard English usage and do not need to be italicized, unless not using italics would be confusing. These terms include

in vivo
in vitro
falciparum (in falciparum malaria)
et al.

parentheses and brackets

Nested parentheses sometimes appear in chemical names. Follow author. (ASM)

(x(yy)x)

If a designation that already contains parentheses must be enclosed within parentheses, do not change the designation. Instead, use brackets in place of the outer set of parentheses. (ASM)

Incorrect:

another strain (strain 123(pXYZ))

Incorrect:

another strain (strain 123[pXYZ])

Correct:

another strain [strain 123(pXYZ)]

In circumstances other than mathematical expressions, the inner set of parentheses should be changed to brackets. (ASM)

Incorrect:

The procedure we used [the Lowry method (12)] . . .

Correct:

The procedure we used (the Lowry method [12]) . . .

In numbered lists, use a single parenthesis to avoid confusion with references (CBE).

Three procedures were instituted hospitalwide: 1) handwashing, which is associated with fewer nosocomial infections; 2) isolation precautions, according to established guidelines; and 3) mandatory screening of staff.

periods

Use periods in in-text abbreviations.

U.S. citizens from Washington, D.C., were . . .
et al.

If an e-mail address ends a sentence, do not add a period at the end of the sentence. Likewise, e-mail addresses or URLs in references are not followed by a period.

possessives

6 months' gestation
Legionnaires' disease
woolsorters' disease

Year indications are not possessive.

1960s, not 1960's

Diseases or syndromes named after a person or place are generally not possessive:

Bright disease
Chagas disease
Down syndrome
Hodgkin disease
Kaposi sarcoma
Kawasaki syndrome
Lyme disease
Marfan syndrome
Minimata disease
Reye syndrome
Rocky Mountain spotted fever

Organization names vary:

American Medical Writers Association
Department of Veterans Affairs

prefixes

Prefixes are usually solid.

Exceptions:

- before a capital letter (un-American)
- before an abbreviation or acronym (non-mRNA)
- before a numeral (pre-1970)
- to avoid confusion with a similar unhyphenated word (re-cover, re-creation)
- to avoid a confusing meaning, as in immunologic terms such as anti-rabbit, anti-goat, anti-mouse, anti-human. "Goat anti-rabbit IgG" means goat antiserum against rabbit IgG, not goat IgG that is antirabbit.

Even if letters are doubled, common prefixes are usually not joined by hyphens.

antiinflammatory
intraabdominal
nonnegotiable
posttraumatic

restrictive and nonrestrictive clauses

Place commas around nonrestrictive clauses (extra information).

The samples, which James analyzed, had been stored for 2 weeks.
(Only one set of samples is being discussed; therefore, the clause "which James analyzed" is not necessary for defining the samples.)

Do not place commas around restrictive clauses (necessary information).

The samples that James analyzed had been stored for 2 weeks.
(More than one set of samples is being discussed. The clause "that James analyzed" defines the noun "samples," telling which samples were analyzed.)

semicolons

- are used to separate independent clauses containing commas.
- are used between two parts of a compound sentence when the independent clauses are not joined by a conjunction.
- separate items in a series if internal punctuation is present.

suffixes

The following suffixes are joined without a hyphen: -fold, -hood, -less, -like, -wise, unless doing so

- creates an unclear or excessively long word
- triples a consonant (bell-like)
- follows a proper noun (Whitman-like)
- follows a number and for decimal fractions, e.g., 10-fold; 2.5-fold (ASM)

Follow the dictionary, ASM, or CSM to determine whether terms are written as one word, two words, or hyphenated. The following is a list of common terms.

acute-phase serum samples
age group (2 words)
antibody-capture ELISA
antibody-positive children
back to back (adv), back-to-back (adj)
bedbug
bed net (n), bed-net (adj)
birthplace
birth weight (2 words)
bloodborne
bottle-fed
breast-feed, breast-fed
case-fatality rate
case-patient
chickenpox
childbearing
child care (n), child-care (adj)
coauthor
convalescent-phase serum samples
co-worker
cut off (v), cutoff (adj)
cross-reaction, cross-infection (see CMS for hyphenated "cross" words)
database
day care (n), day-care (adj)
desktop publishing
e-mail
en route

enzyme-linked immunosorbent assay
fast food (n), fast-food (adj)
finger-prick, finger-stick
follow-up (n), follow up (v)
foodborne
food handlers
food handling (n), food-handling (adj)
fresh water (n), freshwater (adj)
Gram stain
gram-negative, gram-positive
groundwater
handwashing
health care (n), health-care (adj)
immunodeficiency, not immune deficiency
life cycle
life-style
live-born
long term (n), long-term (adj)
long-standing
managed care (n, adj)
needle-stick
online (adv, adj)
overestimate (most over- or under- prefixes are solid)
person-to-person transmission, but transmission was person to person
post-mortem (adv), postmortem (adj)
postpartum
readout
schoolchildren
seawater
snowblindness
stand by (v), standby (adj)
stillborn
short term (n), short-term (adj)
sub-Saharan
T cell (n), T-cell (adj)
tick-borne
toxic shock syndrome
under way
vector-borne
waste water
waterborne
website, webpage
well-being
well-known person, but he is well known
work-up (n), work up (v)
workplace
worldwide

virgules

The virgule often implies duality (AMA).

The physician/patient experience implies the physician and patient are one and the same.

The physician-patient relationship implies two different persons.

"or" or "and" should replace the virgule; avoid and/or.

He or she, not he/she

Father and son bowling league, not father/son bowling league

References

Follow Uniform Requirements, noting in particular the following:

abstracts

Abstracts should not contain references because abstracts need to stand alone.

Abstracts can be cited in the references. If the abstract has only a page number, cite the name of the booklet (e.g., Program and Abstracts).

Presented at the 93rd Conference of the American Society for Microbiology, Las Vegas, NV, 1994; Abstract B-249.

Use postal abbreviations in parentheses for states for location of publisher (omit DC after Washington), but write out states when given as meeting locations.

Identify references in text, tables, and legends as they appear consecutively by Arabic numerals in parentheses.

"Editor" is spelled out in references.

articles in press

Number any references to articles in press and place in the references. Include year. For articles submitted to be published, place in text as for personal communications and unpublished data (W.W. Lamb, submitted for pub.).

dissertations, theses

Dissertations can be used as references; theses cannot. Cite theses in the text, giving all information that would normally be included in a reference. International variations in terminology occur; the primary distinction is whether or not the work is published.

Internet citations

Follow Uniform Requirements.

Morse SS. Factors in the emergence of infectious diseases. *Emerg Infect Dis* [serial online] 1995 Jan-Mar [cited 1996 Jun 5];1(1):[24 screens]. Available from : URL: <http://www.cdc.gov/ncidod/EID/eid.htm>

journal names

Use Index Medicus journal abbreviations; spell out the journal name if it is not in Index Medicus.

organization as author

Spell out the full name of the organization if it is the author, or just put title with no author. Never use anonymous or "no author given."

World Health Organization, not WHO

personal communications, unpublished data

Place in text

(D.E. Berg, pers. comm.)

(D. Stantio, unpub. data)

secondary sources

(e.g., USA Today) Avoid. Suggest that the author use a primary source.

when CDC is the author

The name can vary.

1992-present Centers for Disease Control and Prevention

1980-1991 Centers for Disease Control

1970-1979 Center for Disease Control

Scientific Nomenclature

bacteria

Italicize species, variety or subspecies, and genus when used in the singular. Do not italicize or capitalize genus name when used in the plural.

Listeria monocytogenes is; *Listeria* is a ubiquitous organism.
Listeria are; *salmonellae*; *mycobacteria*

If a paper is about several species of the same genus, the genus needs to be spelled out only in the title and at first use in the abstract, text, tables, and figures. It may subsequently be abbreviated for other species. (ASM)

"We studied *Pseudomonas aeruginosa*, *P. putida*, and *P. fluorescens*."

Do not italicize the name of a class, order, family, or tribe. (AMA)

Exception:

The genus *Salmonella* consists of only two species: *S. enterica* (divided into six subspecies) and *S. bongori*. Most *salmonellae* encountered in EID will be serotypes (serovars) belonging to *S. enterica*. On first mention, put the genus and species in italics, followed by initially capped

serotype in Roman (e.g., *Salmonella enterica* serotype Paratyphi; on 2nd mention, just put *S. Paratyphi*). Serotypes belonging to other subspecies are designated by their antigenic formulae following the subspecies name (e.g., *S. enterica* subspecies *diarizonae* 60:k:z or *S. IIIb* 60:k:z

viruses

When used formally, virus family, subfamily, and genus names should be capitalized and printed in italics. A virus species name should also be printed in italics, with the first letter of any subsequent proper noun capitalized.

Avian leukosis virus

Hepatitis B virus

Subsequent reference to the same virus should be an accepted acronym, not italicized, e.g.,

WNV (for *West Nile virus*)

HBV (for *Hepatitis B virus*)

The name of a tentative species whose taxonomic status is uncertain should not be in italics, but its first word (and any proper noun) should be capitalized.

For more information on this new virus nomenclature style, recently adopted by several international organizations, see: International Committee on Taxonomy of Viruses. Virus taxonomy: classification and nomenclature of viruses: seventh report of the International Committee on Taxonomy of Viruses. Van Regenmortel MHV, chairman. New York: Academic Press;2000.

Spelling

change British spelling to American

analog, not analogue
analyze, not analyse
anesthesia, not anaesthesia
color, not colour
estradiol, not oestradiol
homolog, not homologue
orthopedics, not orthopaedics
titer, not titre

Exceptions:

aerobic

anaerobic

proper names (The XYZ Programme, *S. faecalis*, *N. gonorrhoeae*)

commonly misspelled words

(See also Hyphens for list of terms written as one word, two words, or hyphenated.)

acknowledgment (preferred over acknowledgement)
 Cameroon (not Cameroun)
 Côte d'Ivoire (not Ivory Coast)
 Dhaka (not Dacca)
Escherichia coli O157 use the letter O, not the number 0.
Haemophilus influenzae type b (Hib)
 helminthic, not helmintic
 hemorrhage
 inoculation
 judgment, preferred over judgement
 leukocyte, not leucocyte
 mucus (n), mucous (adj)
 occurred, occurrence
 omit, omitted
 precede
 proceed
 protozoon (n, s), protozoa (n, pl) protozoan (adj)
 repellent
 supernatant, not supernate
 villus (n), villous (adj)

Statistical Terms

common tests

For tests named after a person, avoid the possessive unless the term is always written in the possessive.

Fisher exact test
 Pearson correlation coefficient
 Sorenson correlation coefficient
 Student *t* test

mathematical symbols (+, ‡, , =, <, >, , , ~.)

Are closed up when they indicate mathematical operations. In all other contexts, a space should be printed on each side of the symbol. (ASM)

a probability of <0.01 (note: always use 0 before decimal
 in p value)
 a >25% drop, but 45%±2%
 -70°
 between nucleotides -55 and +19
 G+C content
 densities of <103
 magnification of x200, but 4 x 106
 10× lens objective [note: math font x]
 the MIC was <8.0 g/ml
 >10-fold, greater than fourfold

Use words, not mathematical symbols, in nonmathematical expressions in text. Disregard this rule in the bodies of tables. (ASM)

Tumor cells plus IFN injections, not tumor cells + IFN injections

Exception: >, <, may be used in text.

Do not allow a mathematical symbol to stand for the main verb in a clause.(ASM)

Incorrect:

When $p < 0.005$. . .

Correct:

When p was < 0.005 . . .

Incorrect:

densities < 103

Correct:

densities of < 103

other common statistical terms

(check ASM for large glossary and the text Reporting Statistics in Medicine)

chi square (noun; chi-square, adjective); if not spelled out, use Greek Chi symbol

Mann-Whitney U test

Wilcoxon matched-pairs, Wilcoxon rank sum test, Wilcoxon signed-ranks test, Log-Rank analysis, Wilcoxon 2 sample test,

Kolmogorov-Smirnov test for goodness-of-fit

Epi-Info 5

SAS statistical package

probability

$p = 0.05$ (lower case p , no italics; put zero before decimal)

symbols

Use the % symbol within a sentence. Begin a sentence with "percent."

Put a space between a number and its measure (5 mL, 5 M).

Exception:

No space before the percent or degree symbols.

5%, 70°C

Tables and Figures

Follow ASM style for figures and tables. If there is only one figure or table, do not number it. Tables must be created with the word-processing program's table editor.

abbreviations

Tables and figures should be self-explanatory; therefore, spell out terms even if introduced in the text.

captions and legends

Place table heading above, not below, the table. Capitalize the first letter only. Do not make into a sentence; do not add a period.

Place figure legend within the text, not below the figure. Capitalize the first letter only. The legend may begin with a sentence or a sentence fragment. Add a period.

footnotes

Use superscript letters to indicate footnotes, even if only one footnote; there is no space between a footnote symbol and the footnote.

Stack footnotes.

All table abbreviations should be cited in one footnote.

Place a period at the end of footnotes.

Footnote symbols need not be repeated in like boxhead entries. (ASM)

Consider converting unwieldy table data to footnotes.

Do not use End Notes for references.

orientation

Tables should be arranged with like data reading downward (e.g., organism names, virus titers). Do not use landscape orientation; use portrait.

units of measure in tables

Need not be repeated in every row but should be given once in the boxhead (in parentheses and abbreviated if possible). The unit of measure usually appears after the thing it measures, not necessarily at the end of the boxhead.

Animal wt (g) during treatment

Units of Measure

Common units of measure may be abbreviated without introduction if used with numbers or in tables but not alone in text.

30 ng, but protein measured in nanograms

Common units of measure (see AMA for a complete list)

centimeter	cm
cubic millimeter	mm ³
dalton	Da
deciliter	dL
gram	g
kilodalton	Kda
kilogram	kg
liter	L
meter	m
microgram	µg
microliter	µL
milligram	mg
milliliter	mL
millimeter	mm

Versus – Use "versus" in text (this method versus that one); "vs." in statistics (2.5 vs. 3.4); and "v" in legal citations (Roe v. Wade).

Verbs

dialyze blood, not animals or humans
transfuse blood, not animals or humans

subject-verb agreement

In a noncount noun in a prepositional phrase with "none," the verb plurality is determined by the object of the preposition.

None of the blood was...
None of the patients are participating.
A number (total, group) of persons are.
The number (total, group) reported is 25.
Seventy-eight percent is the largest percentage reported.
The Centers for Disease Control and Prevention is...

A quantity indicated by a unit of measure is singular, even when the units are spelled out. (ASM)

Twelve milliliters was injected.

. . .10 mg was added
. . .5 mL was injected
. . .10 days has passed
. . .220 cpm of radioactivity was detected

Exceptions:

Non-absolute or informal units

. . .10 drops were added

Do not allow a mathematical symbol to stand for the main verb in a clause.(ASM)

Incorrect:

When $p < 0.005$. . .

Correct:

When p was < 0.005 . . .

Medical jargon often uses nouns as verbs. Avoid.

Incorrect:

was electrophoresed

Correct:

underwent electrophoresis

Incorrect:

The patient was biopsied.

Correct:

A biopsy was performed.

III: Other Resources

CDC Intranet Resources

Authorship of CDC or ATSDR Publications, Manual Guide General Administration CDC-69

Manual Guide-General Administration CDC-18, Clearance Procedures for Scientific and Technical Documents

Comprehensive Style Guides and Other Print Resources

For a more in-depth discussion of medical writing and editing issues, refer to other authoritative sources, including print versions of

A Dictionary of Virology (Mahy)

American Medical Association Manual of Style (AMA)

ASM Style Manual (ASM)

Chicago Manual of Style (CSM)

Control of Communicable Diseases Manual (APHA)

Dorland's Illustrated Medical Dictionary

How To Report Statistics in Medicine (Lang)

Index Medicus

International Code of Nomenclature of Bacteria (1990 Revision), P.H.A. Sneath, editor, 1992, American Society for Microbiology

Manual of Systematic Bacteriology (Bergey)

Physicians Desk Reference

Scientific Style and Format (Council of Science Editors [CSE])

Stedman's Medical Dictionary

Stein's Medical Abbreviations

Uniform Requirements for Manuscripts Submitted to Biomedical Journals (UR)

Virology (Fields)

Virus taxonomy: classification and nomenclature of viruses: seventh report of the International Committee on Taxonomy of Viruses. Van Regenmortel MHV, chairman. New York: Academic Press;2000

Webster's New Collegiate Dictionary

Webster's Third New International Dictionary (unabridged)

Words Into Type (WIT)

Internet Resources

Checklist of North American Birds
<http://www.aou.org/aou/birdlist.html>

Encyclopaedia Britannica
www.Britannica.com

GPO's Copyright Law of United States; 162 pp
<http://www.loc.gov/copyright/circs/circ92.pdf>

Index Medicus
<http://www.nlm.nih.gov/tsd/serials/lji.html>

LBSN-List of Bacterial Names with Standing in Nomenclature
<http://www.bacterio.cict.fr/>

Merriam-Webster Collegiate 10th dictionaries
<http://www.facstaff.bucknell.edu/rbeard/diction/html>

Northern Light: good, all-purpose search engine for locating people and addresses, in particular <http://www.nimr.mrc.ac.uk/intro.htm>

Online thesaurus of geographic names
http://shiva.pub.getty.edu/tgn_browser/

Source of online classics including reference works for editors (Strunk, Fowler's) and 3rd edition of American Heritage Dictionary, 2000 edition of Columbia Encyclopedia, and 1996 edition of Roget's Thesaurus
www.bartleby.com

Physicians Desk Reference
<http://www.pdrel.com/> ;
also available free through CDC for CDC employees at
<http://www.pdrel.com/>

Stedman's Medical Dictionary
<http://www.ramex.com/ww/ww-sted0.html>

Uniform Requirements
<http://www.acponline.org/journals/resource/unifreqr.htm>

Virus taxonomy: classification and nomenclature of viruses: seventh report of the International Committee on Taxonomy of Viruses
<http://www.ncbi.nlm.nih.gov/ICTV/>